

Remarks

1. Summary of Office Action

In the final office action, the Examiner rejected claims 1-9, 14-17, and 21-22 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,345,095 (Yamartino), and the Examiner rejected claims 18 and 23 under 35 U.S.C. § 103(a) as being obvious over Yamartino.

2. Summary of Claim Amendments

Applicant has amended claims 1, 5, and 15 to correct a clear typographical error where the word "number" was omitted after the word "telephone." Because this typographical error was so clear, Applicant submits that the amendment to correct the error does not substantively change the understood scope of the claims.

Applicant has also amended claims 5, 14-15 and 21-23 to clarify that the digits entered by the user constitute an "abbreviated number," which, as defined in the specification, could be a PBX extension or, more generally, the last several digits of a telephone number. (See, e.g., page 13, lines 21-23). While Applicant has changed "extension" to "number," it should be understood that the term "number" is broader than the term "extension" and thus means "extension" or another sort of number.

In addition, Applicant has amended claims 1, 5, 15, 21 and 22 to recite that the trigger for adding digits to an entered number is that the entered number does not match *digits at an end of any* telephone number defined by the phone book. More particularly, the amended claims now recite the function of determining whether the entered number matches digits at an end of any telephone number defined by the phone book, and (i) if the entered number matches digits at an end of a telephone number defined by the phone book, the invention involves initiating a call to

that telephone number, but (ii) if the entered digits do not match digits at an end of any telephone number defined by the phone book, the invention involves adding to the entered a predefined set of digits, so as to produce a composite number to which the call is initiated.

This feature is clearly understood from the specification, which explains that a phone book search would look for a telephone number whose last digits match those dialed by the user, and that the subscriber terminal may automatically add a stored set of digits to an entered number if the entered number does not match the ending digits of any entry in the phone book. (See, e.g., page 6, lines 1-3; page 7, line 22 – page 8, line 4). Moreover, Figure 4 of the application as filed illustrates that a determination is made as to whether the entered digits match the last digits of a phone book entry (see block 64) and, (a) if the determination is that the entered digits do not match the last digits of any phone book entry, then a predefined digit sequence is added to the number to generate the composite number (see blocks 74, 76, 80 and 82), but (b) if the determination is that the entered digits match the last digits of a given phone book entry, then the full number listed in that phone book entry is used to initiate the call (see blocks 90 and 84).

Finally, Applicant has added a new claim 24. New claim 24 is a revised version of claim 1, reciting that the trigger for adding a predefined sequence of digits to entered digits is that *the entered digits do not match digits at the end of any phone number in the phone book*.

Pending in this application are claims 1-9, 14-18, and 21-24, of which claims 1, 5, 15, 21, 22, and 24 are independent and the remainder are dependent.

3. Claimed Invention

Applicant's invention, as recited in various ways in the pending claims, is directed to a method and apparatus for abbreviated dialing. Generally speaking, the invention includes the functions of (i) receiving a sequence of digits dialed by a user, (ii) making a determination of

whether the sequence of digits matches digits at an end of any telephone number defined in a phone book, and (iii) if the determination is that the sequence of digits does not match digits at the end of any telephone number defined in the phone book, adding (c.g., pre-pending) to the sequence of digits a predefined set of digits, so as to produce a composite number that can be used to initiate a call.

Further, all claims except claim 24 also recite: if the determination is that the sequence of digits matches digits at the end of a telephone number defined in the phone book, initiating a call to the telephone number. As such, each of the claims (except claim 24) thus involves taking different actions depending on whether the abbreviated set of digits entered by a user match the ending digits of any telephone number defined by the phone book. If the digits match the ending digits of a number in the phone book, then the invention uses that number to initiate the call. Whereas, if the digits do not match the ending digits of any number in the phone book, then the invention appends the predefined digit sequence to establish a composite number and uses that composite number to initiate the call.

4. Response to Claim Rejections

Applicant respectfully traverses the rejection of the pending claims over Yamartino, because Yamartino fails to disclose or suggest all of the elements recited in any of the pending claims. At a minimum, for instance, Yamartino fails to disclose or suggest the functional combination of (i) receiving a sequence of digits dialed by a user, (ii) making a determination of whether the sequence of digits matches digits at an end of any telephone number defined in a phone book, and (iii) if the determination is that the sequence of digits does not match digits at the end of any telephone number defined in the phone book, adding (e.g., pre-pending) to the

sequence of digits a predefined set of digits, so as to produce a composite number that can be used to initiate a call.

At best, Yamartino teaches a system in which, when a user dials a number, the system looks up in a database to determine if the area code and prefix of the number are valid and/or to determine if other area codes could be used instead (in an area overlay scenario, for instance). If the system successfully finds a viable area code and/or prefix in the database, the system may then prepend that area code and/or prefix to the dialed number (possibly in place of a dialed area code and/or prefix).

Although Yamartino discloses a database telephone number lookup and Yamartino discloses prepending digits to a dialed number, Yamartino does not disclose or suggest doing what is recited in Applicant's claims. At a minimum, Yamartino does not disclose or suggest adding digits to a dialed number *in response to a determination that the dialed number does not match digits at an end of any phone number in a phone book*. At best, Yamartino teaches finding viable digits in a database and responsively prepending those digits to an entered number. Thus, Yamartino adds digits when it successfully finds information in the database, whereas Applicant's invention involves adding digits upon *failure* to find a match in a database.

In rejecting the claims, the Examiner stated that Yamartino teaches adding an area code to an entered number "in response to a determination that the digits entered do not match a part of the phone numbers in the database (there is no area code in the digits entered)". The claims as amended, however, now make clear that Applicant's invention involves adding digits in response to a determination that the entered digits do not match *digits at the end* of any telephone number in the phone book. That is, if no telephone number in the phone book has ending digits that

match the digits entered by the user, then the predefined digit sequence would be added to the entered digits.

Further, Yamartino does not disclose the additional combination of functions recited in all claims except claim 24. In particular, Yamartino does not disclose determining if the entered digits match digits at the end of any phone number in a phone book and (i) *if so*, using the phone number to initiate a call or (ii) *if not*, adding predefined digits to the entered digits so as to establish a composite number and using the composite number to initiate a call.

Because Yamartino does not disclose or suggest all of the elements of any of Applicant's claims, Applicant submits that Yamartino fails to anticipate or render obvious any of the claims. Consequently, Applicant submits that all of the claims are in condition for allowance.

Applicant thus requests favorable reconsideration and allowance.

5. Interview Summary

My associate Mr. Lawrence Aaronson and the Examiner held a telephone interview on May 17, 2004, for which Applicant thanks the Examiner.

During the interview, you discussed the Yamartino reference, and you discussed claiming that the trigger for adding predefined digits to entered digits is that the entered digits *do not match digits at the end of any telephone number* defined in the phone book. The Examiner indicated that claims reciting this trigger would distinguish over the Yamartino reference.


The Examiner further suggested revising the claims to indicate that, if the entered digits *do match* digits at the end of a telephone number in the phone book, the invention would involve using that telephone number. Applicant has accordingly revised the claims as shown above, to include this limitation in all claims except claim 24. Applicant is retaining claim 24 without that

additional element, because Applicant submits that the invention as claimed even without that additional element patentably distinguishes over the art of record.

Respectfully submitted,

**MCDONNELL BOEHNEN
HULBERT & BERGHOFF LLP**

Dated: June 4, 2004

By: 
Dennis D. Crouch
Reg. No. 55,091